

**Fermilab**  
**FY2002 Self-assessment**  
**Process Assessment Report**  
**For**  
**Division/Section** Particle Physics Division

**Date** September 20, 2002

Division/Section performing assessment

Particle Physics Division (PPD)

Name of organization that owns assessed process

PPD - Environmental Safety & Health/Building Management Services Department

Organization Strategy

Results of the assessment process are used to evaluate the effectiveness of existing programs and identify areas in need of improvement. It is also used to determine priorities for actions that will improve the Particle Physics Division ability to meet the performance measures negotiated between Fermilab and the DOE.

Names of Personnel on Assessment team

Martha Heflin	8971N	PD	PPD SSO
T.J. Sarlina	4129N	PD	ESH/BMS Dept. Head
John Cooper	7060N	PD	PPD Division Head
*Amy Pavnica	10683N	CD	CD SSO
*Dennie Parzyck	9935V	DOE	DOE-FAO

\*The role played by DOE and CD was that of reviewers of the audit results. Comments received by them have been incorporated into this final report.

Name of process assessed

ES&H Training Assessment

#### Brief description of process to be assessed

The purpose of the assessment was to determine if required ES&H training was current for PPD employees. The assessment team specifically reviewed completion of Rad Worker, GERT, Rad Source, MMR, Back Works, and Computer Workstation Review.

#### 1. Are metrics associated with this process? If so, what are they?

The following performance levels will be applied to the percentage of employees who have completed required training.

Outstanding	-	> 95%
Excellent	-	> 90% to <95%
Good	-	> 85% to < 90%
Marginal	-	<85%

#### 2. What are the names of the procedures associated with this process?

Fermilab ES&H Manual (FESHM) Chapter 4000 describes the requirements associated with training.

#### 3. Are these procedures being followed? Are they current?

FESHM 4000 is current and PPD is following the requirements as described in that chapter.

#### 4. Describe the methodology used to assess this process.

The PPD SSO reviewed the training tickler reports for all ES&H training identified on the ITNA. This led to a review of approximately 10% of the Division's completed ITNAs.

#### 5. Results of the assessment

- a. It was found that most supervisors were successful in creating a training plan that was applicable. However, some supervisors did not understand the questions on the ITNA and consequently developed training plans that were not entirely applicable to the tasks the employees were performing. In addition, some supervisors created a generic ITNA and applied it to all the members in their groups. That resulted, in some cases, in employees signed up for training they didn't need. Other supervisors felt that safety training, even though not directly related to what their employees were doing, was a good idea and therefore developed training plans to enroll them in everything available.
- b. Concurrently during the months of March and April the PPD ES&H Department made a significant push to get people through the training they needed. The focus of the training push was on the following six courses; Rad Worker, GERT, Rad Source, MMR, Back Works, and Computer Workstation Review. The Division was experiencing only moderate success getting people to enroll in and

attend the training. Based on feedback from the employees, it was concluded that not all of the tickler lists were entirely accurate. By the end of April 2002, the PPD ES&H Department decided to continue to offer and encourage enrollment in the aforementioned courses, but that some amount of "clean up" needed to be done with the ITNAs and the training plans.

In April 2002, the PPD SSO began to meet with each Department Head as part of their routine meetings with the Division Head. At the start of each meeting, various ES&H topics are discussed. During the months of April and May 2002, the focus ES&H topic was training. Each Department Head was provided a list of those individuals in their departments that are past due for Rad Worker, GERT, Rad Source, MMR, Back Works, and Computer Workstation Review. Department Heads have been asked to encourage their group leaders to get the individuals into training or review their ITNAs to determine if the training on the individual training plan is applicable. It is anticipated that this will lead to better attendance at relevant ES&H training and a serious review of the training needs for PPD personnel.

- c. No major deficiencies have been identified.
- d. No notable practices have been identified.
- e. This is the first time PPD has assessed this process.
- f. The PPD completion rate for ES&H training is 90.8% (anticipated to be higher by September 30, 2002).
- g. This resulted in a rating of excellent.

#### Identified opportunities for improvement

- 1.) Provide feedback to the Department Heads on a quarterly basis regarding ES&H training completed in their departments.
- 2.) Continue to track Rad Worker, GERT, Rad Source, MMR, Back Works and Computer Workstation Review until the percent complete is greater than 90%.

#### Schedule for implementation of improvements

We will begin immediately providing Department Heads quarterly feedback regarding the completion of ES&H training in their departments. We will track our six focus courses for the next six months. Our goal will be to achieve >90% completion by the end of that time.

#### Status of improvements from previous assessment

This is the first time that this process has been assessed; therefore no previous recommended improvements exist.

#### Attachments (supporting data, worksheets, reports, etc.)

Training completed was assessed after the first quarter of CY2002 (See chart 1). In March 2002, the Division was 82.9% complete with ES&H training identified on the ITNA. After a continued effort on the part of the Department Heads and the ES&H Department, the Division's current number is 90.8% (See chart 2). That number is expected to increase by the end of the third quarter of CY2002 because we are currently providing Emergency Warden Training, Haz. Comm II training, and Waste Generator Training. That combined with the ongoing effort to get people through our six focus courses (Rad Worker, GERT, Rad Source, MMR, Back Works and Computer Workstation Review) will result in a higher percent of ES&H training completed.

**CHART 1 – ES&H Training completed as of March 2002**

<u>COURSE</u>	<u>PPD</u>		
	# REQ.	# TAKEN	%
ASBESTOS AWARE	31	22	71.0%
BACK WORKS	591	520	88.0%
BASIC ELECTRICAL	228	206	90.4%
BE WORKER <sup>1</sup>	2	0	0.0%
BERYL HANDLING	164	163	99.4%
CD COMPUTER RM	2	2	100.0%
CDF SUPER ACC	139	120	86.3%
COMPRESS GAS	127	79	62.2%
COMPUTR WORK	392	290	74.0%
CONFINED SPACES	170	162	95.3%
CONST MGMT	31	24	77.4%
CONTRLD ACC	143	106	74.1%
CONTRD ACC EV	145	103	71.0%
CPR	84	84	100.0%
CRANE	91	67	73.6%
CRANE OJ	91	71	78.0%
CRAVE EV	111	95	85.6%
CRYO SAFETY	81	81	100.0%
CYANIDE PLATING	4	4	100.0%
DEFENSIVE DRV	25	15	60.0%
DO HAZARD AW	149	96	64.4%

ELECT SAFETY QL	99	78	78.8%
EMER WARDEN	30	10	33.3%
FIRE EXT	110	26	23.6%
FORKLIFT	84	61	72.6%
FORKLIFT EV	94	64	68.1%
FORKLIFT OJ	96	77	80.2%
GERT	295	234	79.3%
HAZ MAT CHEM	3	3	100.0%
HAZ MAT/WASTE	1	1	100.0%
HAZCOM1	636	619	97.3%
HAZCOM2	83	72	86.7%
HAZWOPR	1	1	100.0%
HAZWOPR - R	2	1	50.0%
HEARING CONSERV	24	14	58.3%
INDUSTRIAL ERGO	114	40	35.1%
LASER SAEFTY	90	86	95.6%
LEAD HANDLING	70	67	95.7%
LEAD WORKER	25	21	84.0%
LOTO1	344	332	96.5%
LOTO2	292	287	98.3%
MATERIAL MOVE	30	24	80.0%
NEC	27	25	92.6%
NEPA REVIEW <sup>2</sup>	5	0	0.0%
ODH	76	49	64.5%
OPS MGR	87	80	92.0%
OSHA CS 10 HOUR	2	2	100.0%
OSHA CS 30 HOUR	8	8	100.0%
OUTDOOR SAFETY	39	13	33.3%
PDLOTO	46	9	19.6%
PD HAZ AN/INTEGRATED SAFETY MANAGEMENT <sup>3</sup>	153	86	56.2%
PPE	637	605	95.0%
RAD SOURCE	43	26	60.5%
RAD WORKER	318	257	80.8%
RCT REQUAL	4	1	25.0%
RESP. PROT	22	12	54.5%
SCOTT AIR	6	3	50.0%
SUBCONTR. ORIEN	3	3	100.0%
SUPR OF SUMMER	53	30	56.6%
TECH SHOP	155	107	69.0%
WASTE COOR	3	3	100.0%
WASTE GEN	33	33	100.0%
WASTE MIN	636	602	94.7%
WINTER DRV	23	3	13.0%
Total	7703	6385	82.9%

<sup>1</sup> The two individuals identified as beryllium workers are not performing beryllium worker activities. These employees have had their ITNAs updated and currently there are no individuals in PPD who are involved in work that may lead to beryllium exposures above the action levels.

<sup>2</sup> We are currently awaiting the availability of NEPA training. When it is available, PPD will achieve 100% completion.

<sup>3</sup> PPD is actively involved in another tripartite audit looking at the implementation of integrated safety management. One recommendation that will come from that audit is to update our internal procedure PPD\_OPER\_004 titled PPD Implementation of Integrated Safety Management and Fermilab ES&H Manual (FESHM) chapter 2060. After the update is complete, the Division will provide training for all current supervisors.

#### **CHART 2 – ES&H Training completed as of September 2002**

<b>COURSE</b>	<b>Course #</b>	<b>PPD (9/23/02)</b>		
		<b># REQ.</b>	<b># TAKEN</b>	<b>%</b>
ASBESTOS AWARE	FN000251/CR	30	22	73.3%
BASIC ELECTRICAL	FN000235/CR	211	208	98.6%
BE WORKER	FN000320/CR	0	0	
BERYL HANDLING	FN000196/CR	166	166	100.0%
BE ASSOCIATED	FN000249/CR	7	0	0.0%
COMPRESS GAS	FN000213/CR	129	90	69.8%
COMPUTR WORK	FN000324/CR	302	312	103.3%
CONFINED SPACES	FN000003/CR	167	167	100.0%
CONST MGMT	FN000303/CR	24	24	100.0%
CONTRLD ACC	FN000311/CR	137	123	89.8%
CONTRD ACC EV	FN000311/EV	138	122	88.4%
CPR	FN000001/CR	82	82	100.0%
CRANE	FN000005/CR	76	67	88.2%
CRANE OJ	FN000005/OJ	103	100	97.1%
CRAVE EV	FN000005/EV	77	66	85.7%
CRYO SAFETY	FN000115/CR	90	39	43.3%
CYANIDE PLATING	FN000195/CR	4	4	100.0%
DEFENSIVE DRV	FN000008/CR	15	15	100.0%
ELECT SAFETY QL	FN000234/CR	97	78	80.4%
EMER WARDEN	FN000010/CR	32	17	53.1%
EOC/ICS	FN000317/CR			
FELOTO	FE000003/CR			
FORKLIFT	FN000014/CR	73	66	90.4%
FORKLIFT EV	FN000014/EV	73	62	84.9%
FORKLIFT OJ	FN000014/OJ	88	79	89.8%
GERT	FN000241/CR	342	287	83.9%
HAZCOM1	FN000156/CR	662	636	96.1%
HAZCOM2	FN000157/CR	97	77	79.4%
HEARING CONSERV	FN000154/CR	27	27	100.0%
INDUSTRIAL ERGO	FN000297/CR	115	87	75.7%
LASER SAEFTY	FN000126/CR	88	87	98.9%
LEAD HANDLING	FN000123/CR	76	75	98.7%

LEAD WORKER	FN000292/CR	17	13	76.5%
LOTO1	FN000088/CR	373	355	95.2%
LOTO2	FN000212/CR	292	290	99.3%
MATERIAL MOVE	FN000125/CR	25	22	88.0%
NEC	FN000015/CR	27	25	92.6%
NEPA REVIEW	FN000194/CR	5	0	0.0%
ODH	FN000029/CR	72	63	87.5%
OPS MGR	FN000310/CR	84	79	94.0%
OUTDOOR SAFETY	FN000265/CR	15	13	86.7%
PPE	FN000199/CR	665	628	94.4%
RAD MAT TRANS - R	FN000348/CR			
RAD SOURCE	FN000048/CR	39	24	61.5%
RAD WORKER	FN000301/CR	301	260	86.4%
RCT REQUAL	FN000300/CR	4	2	50.0%
RESP. PROT	FN000024/CR	19	13	68.4%
SITE WIDE DRILL	FN000318/CR			
SUBCONTR. ORIEN	FN000221/CR			
SUPR OF SUMMER	FN000309/CR	54	44	81.5%
TECH SHOP	FN000258/CR	155	118	76.1%
WASTE COOR	FN000178/CR	2	2	100.0%
WASTE GEN	FN000240/CR	25	24	96.0%
WASTE MIN	FN000250/CR	664	622	93.7%
WINTER DRV	FN000064/CR			
Total		6366	5782	90.8%